



Department of Energy
National Nuclear Security Administration
Sandia Field Office
P.O. Box 5400
Albuquerque, NM 87185

ENTERED



FEB 07 2019

Mr. John E. Kieling
Chief
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Dr. East, Bldg 1
Santa Fe, New Mexico 87505

Subject: Submittal of Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) Annual Long-Term Monitoring and Maintenance Report for Calendar Year (CY) 2018, Sandia National Laboratories/New Mexico (SNL/NM), Environmental Protection Agency (EPA) Identification Number NM5890110518

Dear Mr. Kieling:

Enclosed is the SWMUs and AOCs Annual Long-Term Monitoring and Maintenance Report for CY 2018 provided by the Department of Energy, National Nuclear Security Administration and the National Technology and Engineering Solutions of Sandia, LLC to the New Mexico Environment Department Hazardous Waste Bureau. This submittal satisfies the annual reporting requirement in Permit Attachment M, Section M.4 of the Hazardous Waste Facility Operating Permit for SNL/NM.

The report documents the conditions of SNLs SWMUs subject to the requirements of Permit Attachment M. This report demonstrates the effectiveness of SNL's administrative and physical safety controls employed at the SWMUs and AOCs during CY 2018.

If you have questions contact David Rast of our staff at (505) 845-5349.

Sincerely,


Jeffrey P. Harrell
Manager

Enclosure

cc: See Page 2

Mr. John E. Kieling

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FEB 07 2019

cc w/enclosure:

David Cobrain
NMED/HWB
2905 Rodeo Park Dr. East, Bldg. 1
Santa Fe, New Mexico 87505

Naomi Davidson
NMED/HWB
121 Tijeras Ave. NE, Suite 1000
Albuquerque, New Mexico 87102

Susan Lucas Kamat
NMED/DOE OB
121 Tijeras Ave. NE, Suite 1000
Albuquerque, New Mexico 87102

Laurie King
Environmental Protection Agency Region 6
Fountain Place Suite 1200, 1445 Ross Ave.
Dallas, Texas 75202

Zimmerman Library
MSC05 3020
1 University of New Mexico
Albuquerque, New Mexico 87101-0001

Cynthia Wimberly, SFO/OOM
David Rast, SFO/ENG

cc w/o enclosure:

Amy Blumberg, SNL/NM
Sue Collins, SNL/NM
Christi Leigh, SNL/NM
Paul Shoemaker, SNL/NM
Anita Reiser, SNL/NM
Patrick Dotson, SNL/NM
James Todd, SFO/ENG
Susan Lacy, SFO/ENG
David Rast, SFO/ENG
NNSA-2019-000337

**Submittal of Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) Annual Long-Term Monitoring and Maintenance Report for Calendar Year 2018, Sandia National Laboratories/New Mexico, Environmental Protection Agency (EPA) Identification Number NM5890110518
March 2019**

**Sandia National Laboratories
Albuquerque, New Mexico
EPA ID No. NM5890110518**

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.



Paul E. Shoemaker, Senior Manager
R & D Science and Engineering
National Technology & Engineering Solutions of Sandia LLC
Albuquerque, New Mexico
Operator

1/15/2019
Date signed



Jeffrey P. Harrell, Manager
U.S. Department of Energy
National Nuclear Security Administration
Sandia Field Office
Owner

2/7/19
Date signed



**Sandia
National
Laboratories**

**SOLID WASTE MANAGEMENT UNITS AND AREAS OF CONCERN
ANNUAL LONG-TERM MONITORING AND MAINTENANCE REPORT
FOR CALENDAR YEAR 2018**

SANDIA NATIONAL LABORATORIES, NEW MEXICO

March 2019



**U.S. DEPARTMENT OF
ENERGY**



**United States Department of Energy
Sandia Field Office**

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**SOLID WASTE MANAGEMENT UNITS AND AREAS OF CONCERN
ANNUAL LONG-TERM MONITORING AND MAINTENANCE REPORT
FOR CALENDAR YEAR 2018
MARCH 2019**

Facility: Solid Waste Management Units and Areas of Concern

Location: Sandia National Laboratories
Albuquerque, New Mexico

EPA ID No.: NM5890110518

Permit Basis: Resource Conservation and Recovery Act Facility Operating
Permit, effective February 26, 2015

Owner: United States Department of Energy
Sandia Field Office
Technical Contact: Mr. David Rast, General Engineer
U.S. Department of Energy, Sandia Field Office
P.O. Box 5400/MS 0184
Albuquerque, NM 87185-5400
(505) 845-5349
David.Rast@nnsa.doe.gov

Operator: National Technology &
Engineering Solutions
of Sandia, LLC
Technical Contact: Dr. Christi Leigh, Manager
Environmental Restoration and Stewardship
Department
Sandia National Laboratories
P.O. Box 5800/MS 1103
Albuquerque, NM 87185-1103
(505) 844-3185
cdleigh@sandia.gov

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ACRONYMS AND ABBREVIATIONS

AOC	Area of Concern
CY	calendar year
DOE	U.S. Department of Energy
EPA	U.S. Environmental Protection Agency
KAFB	Kirtland Air Force Base
LTMM	Long-Term Monitoring and Maintenance
MWL	Mixed Waste Landfill
NMED	New Mexico Environment Department
NNSA	National Nuclear Security Administration
NTESS	National Technology & Engineering Solutions of Sandia, LLC
Permit	RCRA Facility Operating Permit
RCRA	Resource Conservation and Recovery Act
SNL/NM	Sandia National Laboratories, New Mexico
SWMU	Solid Waste Management Unit

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EXECUTIVE SUMMARY

This SWMU and AOC Annual Long-Term Monitoring and Maintenance (LTMM) Report for Calendar Year (CY) 2018 (Annual LTMM Report) details the measures performed for 24 Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) at Sandia National Laboratories/New Mexico (SNL/NM) in accordance with the requirements of the “Long-Term Monitoring and Maintenance [LTMM] Plan for SWMUs and AOCs Granted Corrective Action Complete with Controls” in Attachment M of the Resource Conservation and Recovery Act Facility Operating Permit (Permit) for SNL/NM, which took effect February 26, 2015. This Annual LTMM Report does not present the measures for SWMU 76, Mixed Waste Landfill (MWL), as the applicable MWL reporting adheres to the approved MWL LTMM Plan, Section 4.8.1 and requires a separate annual report that will be submitted to the New Mexico Environment Department by June 30, 2019. SWMUs 58FF, 58B/8Y, and 154 completed the permit modification process in 2018 with a determination of corrective action complete with controls and are included in this report.

Measures at the 24 SWMUs and AOCs addressed in this report include surveillance of site conditions and maintenance of institutional controls. For all SWMUs and AOCs except SWMU 45, conditions requiring maintenance or repair activities were not identified during the 2018 Permit-required annual site inspections.

Evidence of erosion was identified during the annual site inspection performed at SWMU 45 during the 2017 annual site inspection and was reported in the Annual SWMUs and AOCs Annual LTMM Report for CY 2017 (SNL/NM March 2018). There was no significant expansion of this eroded area along the TA-IV escarpment in 2018 and no additional areas of erosion were identified.

SNL/NM personnel have developed a plan (TA-IV Slope Stabilization Project) designed to mitigate erosion occurring along the SNL TA-IV escarpment; the work will include SWMUs 45, 46, and 229, and will address the erosion noted at SWMU 45. The status and progress of this project will be reported in the Annual SWMUs and AOCs Annual LTMM Report for CY 2019 to be submitted to the New Mexico Environment Department on March 31, 2020, as required by the Permit.

Based upon the inspections performed and site conditions observed, the administrative and physical institutional controls in place at the SWMUs and AOCs during CY 2018 are effectively providing continued protection of human health and the environment.

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1.0 INTRODUCTION

SNL/NM is a multimission laboratory currently managed and operated by National Technology & Engineering Solutions of Sandia, LLC (NTESS), a wholly owned subsidiary of Honeywell International Inc., for the U.S. Department of Energy's (DOE) National Nuclear Security Administration (NNSA). SNL/NM is located within the boundaries of Kirtland Air Force Base (KAFB), immediately southeast of the City of Albuquerque in Bernalillo County, New Mexico.

Surveillance of site conditions and maintenance of institutional controls are necessary for continued protection of human health and the environment at 24 SWMUs and AOCs that have undergone corrective action (Figure 1-1) at SNL/NM. These SWMUs and AOCs, together with the surveillance and institutional controls required for each, are specified in Attachment M of the Resource Conservation and Recovery Act (RCRA) Facility Operating Permit (Permit), which took effect February 26, 2015 (New Mexico Environment Department [NMED] January 2015).

This report does not present the relevant monitoring and maintenance activities for SWMU 76, Mixed Waste Landfill (MWL). Those activities are detailed in the approved MWL Long-Term Monitoring and Maintenance (LTMM) Plan, Section 4.8.1 (SNL/NM March 2012), which requires a separate annual report that will be submitted to the NMED by June 30, 2019.

1.1 Background

Corrective action and continued management of the SWMUs and AOCs with Corrective Action Complete with Controls status, as approved by the NMED, are conducted in accordance with the requirements of the Permit. Each SWMU and AOC at SNL/NM is listed in one of four tables that comprise Permit Attachment K, "Solid Waste Management Units and Areas of Concern." Figure 1-1 of this Annual LTMM Report shows the locations of the SWMUs and AOCs requiring institutional controls; these are listed in Permit Attachment K, Table K-3 "Solid Waste Management Units and Areas of Concern for which Corrective Action is Complete with Controls." The comprehensive requirements for monitoring and maintenance of long-term institutional controls at the identified SWMUs and AOCs are specified in Permit Attachment M, "Long-Term Monitoring and Maintenance Plan for Solid Waste Management Units and Areas of Concern Granted Corrective Action Complete with Controls," which includes a list of the relevant SWMUs and AOCs. A summary of the associated surveillance and control requirements is included in Permit Attachment M, Table M-1, "Summary of Institutional Controls for Solid Waste Management Units and Areas of Concern Requiring Controls."

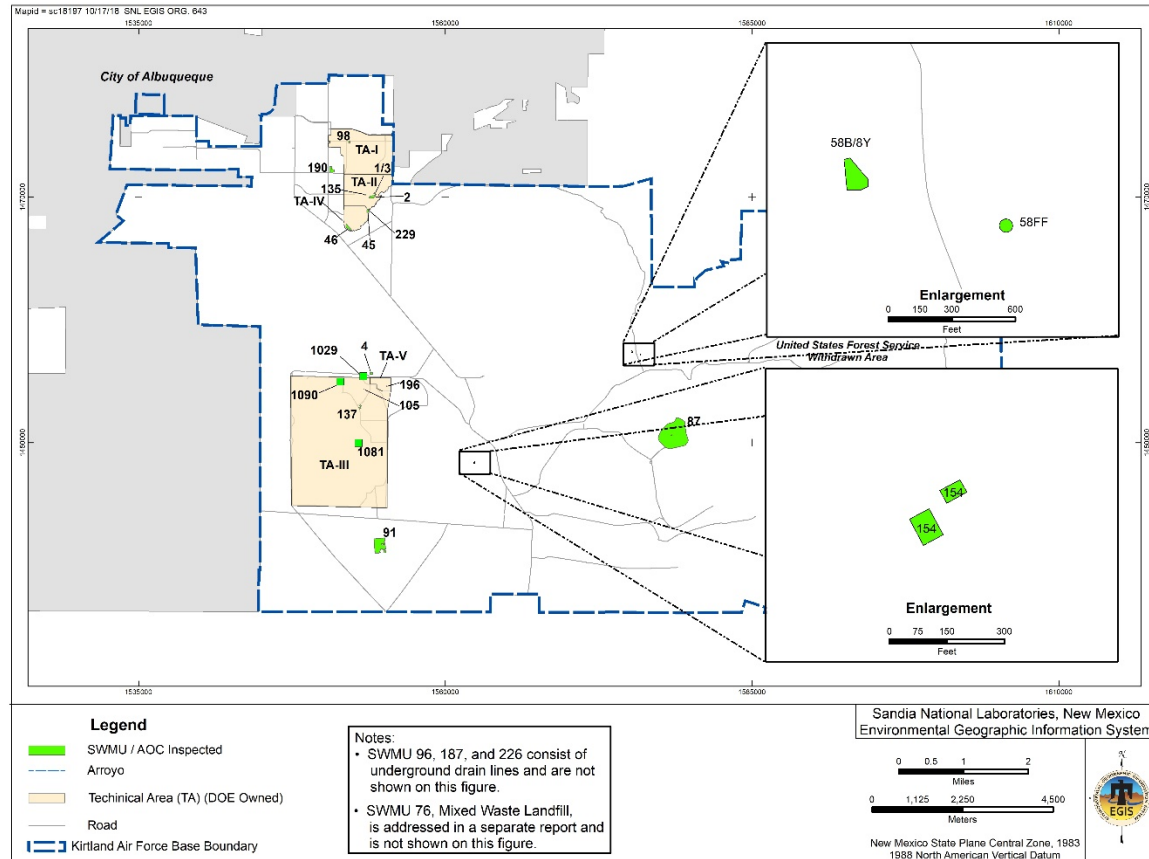


Figure 1-1
 Location of Solid Waste Management Units and Areas of Concern
 for which Corrective Action is Complete with Controls, Sandia National Laboratories, New Mexico

1.2 Purpose and Scope

The purpose of this report is to document maintenance of controls, and activities conducted during 2018. The reporting period extends from January 1 to December 31 of each CY. Table 1-1 lists and Figure 1-1 shows the SWMUs and AOCs addressed in this Annual LTMM Report. Table 1-1 and Figure 1-1 both reflect two modifications to the Permit that took effect during 2018; these are discussed in Section 2.4. In particular, SWMUs 58FF, 58B/8Y, and 154 were added to Table K-3 in Permit Attachment K; and are included in this report.

Table 1-1
 List of Solid Waste Management Units and Areas of Concern for which
 Corrective Action is Complete with Controls
 Sandia National Laboratories, New Mexico

SWMU or AOC Number	SWMU or AOC Name
1	Radioactive Waste Landfill
2	Classified Waste Landfill (TA-II)
3	Chemical Disposal Pit
4	LWDS Surface Impoundments
45	Liquid Discharge (Behind TA-IV)
46	Old Acid Waste Line Outfall
58FF	Fire Bricks Feature (Coyote Canyon Blast Area)
58B/8Y	Debris Pile and Pit Area (Coyote Canyon Blast Area)
87	Building 9990 Firing Site
91	Lead Firing Site (Thunder Range)
96	Storm System Drain
98	Building 863 (TCA, Photochemical Releases: Silver Catch Boxes)
105	Mercury Spill (Building 6536)
135	Building 906 Drain System
137	Building 6540/6542 Septic System (TA-III)
154	Bldg. 9960 Septic System and Seepage Pits (Coyote Test Field)
187	Septic Tank Piping for POTW
190	Steam Plant Tank Farm
196	Building 6597 Cistern (TA-V)
226	Old Acid Waste Line
229	Storm Drain System Outfall (for TA-II)
1029	Building 6584 North Septic System (TA-III)
1081	Building 6650 Septic System (TA-III)
1090	Building 6721 Septic System (TA-III)

Notes:

- AOC = Area of Concern.
- LWDS = Liquid Waste Disposal System.
- POTW = Publicly Owned Treatment Works.
- SWMU = Solid Waste Management Unit.
- TA = Technical Area.
- TCA = 1,1,1-trichloroethane.

1.3 Report Organization

This report is organized as follows:

- Chapter 1 presents background information, purpose and scope, and report organization.
- Chapter 2 provides a summary of controls, surveillance, and maintenance requirements specified in Permit Attachment M.
- Chapter 3 presents the results of the inspections performed during the reporting period.
- Chapter 4 presents a general summary and conclusions for the 2018 reporting period.
- Chapter 5 lists the references cited in this report.

2.0 CONTROLS AND SURVEILLANCE REQUIREMENTS

Measures to be taken to provide protection of human health and the environment are defined in Permit Attachment M. The measures include surveillance of site conditions and maintenance of institutional controls. The controls are consistent with the risks presented by the site conditions and constituents of concern at each SWMU and AOC. The controls are implemented in an integrated and layered approach to enhance their effectiveness and reliability, and to provide continued protection in the event that one or more controls become temporarily impaired.

The required administrative and physical controls are described in Permit Attachment M, Section M.2 “Institutional Controls,” and are summarized in Section 2.1 and 2.2, respectively. Maintenance requirements are described in Section M.3, “Maintenance of Institutional Controls,” and are covered in Section 2.3 of this report.

2.1 Administrative Controls and Surveillance Requirements

Administrative controls for the SWMUs and AOCs listed in Table 1-1 include information management, awareness, and restrictions on future land use. Information about each SWMU and AOC includes:

- Site location and characteristics;
- Site history and corrective action;
- Land use permits or agreements with KAFB;
- Documentation of current site conditions, including information from annual inspections;
- Type of controls;
- Maintenance records;
- Planning information, including restrictions on future activities at the site; and
- Copies of reports previously submitted to NMED.

The information is to be maintained, and plans for future DOE and SNL/NM activities at or near each SWMU and AOC in Permit Table K-3 are to be evaluated during planning stages to identify aspects that are not consistent with industrial land use.

Table 2-1
 Summary of Physical Controls and Surveillance Requirements
 Solid Waste Management Units and Areas of Concern
 Sandia National Laboratories, New Mexico

SWMU or AOC Number	Signs and Postings	Inspection Frequency	Additional Information
1	4 signs on SWMU perimeter, one each in selected corners of the SWMU.	Annual	N/A
2	5 signs on SWMU perimeter, one in the approximate middle of each side of the SWMU.	Annual	N/A
3	Included with SWMU 1.	Annual	Located adjacent to SWMU 1.
4	4 signs on SWMU perimeter, one in the approximate middle of each side of the SWMU.	Annual	N/A
45	5 signs on SWMU perimeter, one in approximately each corner of the SWMU outside of the TA-IV fence.	Annual	Western half of the SWMU is located within the TA-IV fenced boundary.
46	4 signs along the TA-IV fence line and 7 signs posted along the south and west perimeter of the SWMU.	Annual	N/A
58FF ¹	2 signs on perimeter	Annual	Feature within SWMU 58.
58B/8Y ¹	4 signs on perimeter	Annual	Feature within SWMU 58.
87	4 signs, one at the access road and 3 on the perimeter of the SWMU.	Annual	N/A
91	4 signs on SWMU perimeter, one in the approximate middle of each side of the SWMU.	Annual	N/A
96	Not feasible	None	SWMU consists of underground storm drains throughout TA-I. No signs, postings, or inspections are feasible due to SWMU features.
98	Not feasible	None ²	SWMU consists of a subsurface area located under a building. No signs, postings, or inspections are feasible due to SWMU features.

See notes at end of table.

Table 2-1 (Concluded)
 Summary of Physical Controls and Surveillance Requirements
 Solid Waste Management Units and Areas of Concern
 Sandia National Laboratories, New Mexico

SWMU or AOC Number	Signs and Postings	Inspection Frequency	Additional Information
105	4 signs on SWMU perimeter, one in the approximate middle of each side of the SWMU.	Annual	N/A
135	1 sign.	Annual	N/A
137	4 signs on SWMU perimeter, one each at selected corners of the SWMU.	Annual	N/A
154 ¹	4 signs at 2 areas that comprise the SWMU; 2 signs near selected corners of each area.	Annual	N/A
187	Not feasible	None	SWMU consists of underground sewer lines throughout TA-I. No signs, postings, or inspections are feasible due to SWMU features.
190	4 signs on SWMU perimeter, one in the approximate middle of each side of the SWMU.	Annual	N/A
196	1 sign near the northeast corner of the SWMU.	Annual	N/A
226	Not feasible	None	SWMU consists of underground drain line throughout TA-I, -II, and -IV. No signs, postings, or inspections are feasible due to SWMU features.
229	1 sign at the top of the outfall.	Annual	N/A
1029	3 signs on SWMU perimeter.	Annual	N/A
1081	3 signs on SWMU perimeter.	Annual	N/A
1090	1 sign, approximately in the middle of the SWMU.	Annual	N/A

Notes:

AOC = Area of Concern.

N/A = Not applicable.

SWMU = Solid Waste Management Unit.

TA = Technical Area.

1 = Added through Permit modification effective July 15, 2018

2 = Revised through Permit modification effective October 22, 2018

2.2 Physical Controls and Inspection Requirements

Physical controls for the SWMUs and AOCs in Table 2-1 include the following:

- Warning and information signs posted at each SWMU/AOC where feasible;
- Fences that restrict access to some or all portions of each SWMU/AOC;
- Physical features such as subsurface location (e.g., sewer lines); and
- Limiting land use to industrial activities.

Permit Attachment M, Table M-1 “Summary of Institutional Controls for Solid Waste Management Units and Areas of Concern Requiring Controls,” lists the specific controls and surveillance requirements. They are further summarized in Table 2-1 of this report.

Annual inspections are to be performed (except as noted in Table 2-1) to verify that physical controls are in place, and to determine whether adverse conditions exist at each SWMU or AOC that would impair the controls or lead to inadvertent exposure to hazardous wastes or hazardous waste constituents.

2.3 Maintenance Requirements

The physical controls (e.g. signs) for the SWMUs and AOCs are to be maintained and repaired in a timely manner as specified in Permit Attachment M, Table M-2 “Maintenance Schedule.” Maintenance is to occur on the schedule in Table M-2 unless weather or other site-specific conditions result in a delay. Each repair is to be reviewed in a follow-up inspection within 180 days. The follow-up inspection may be combined with an annual inspection.

Table 2-2 summarizes the maintenance requirements and schedule.

Table 2-2
 Solid Waste Management Units and Areas of Concern Maintenance Schedule
 Sandia National Laboratories, New Mexico

Maintenance Issue	Response Schedule
Erosion, seepage, or subsidence	Evaluate severity and if necessary develop mitigation plan within 120 days Complete in a timely manner
Newly-occurring or newly-discovered contamination	See Permit Part 8
Signs	Begin to address within 30 days Complete in a timely manner
Activities that are inconsistent with site restrictions	Begin to address within 30 days Complete in a timely manner

See notes at end of table.

Table 2-2 (Concluded)
Solid Waste Management Units and Areas of Concern Maintenance Schedule
Sandia National Laboratories, New Mexico

Maintenance Issue	Response Schedule
Awareness measures to address new residential activities adjacent to SWMU/AOC locations	Develop measures within 30 days Implement measures in a timely manner
Access restrictions to address new residential activities adjacent to SWMU/AOC locations	Develop measures within 60 days Implement measures in a timely manner

Notes:

AOC = Area of Concern.

Permit = Resource Conservation and Recovery Act Facility Operating Permit.

SWMU = Solid Waste Management Unit.

2.4 Changes in Requirements During CY2018

During CY 2018, several Permit modifications became effective. Two of these modifications affected the requirements in Permit Attachment M. They are summarized below.

- The NMED approved a Permit modification granting corrective action complete (CAC) status to 6 SWMUs and AOCs. Three of these (58FF, 58B/8Y, and 154) were granted CAC status with controls and were added to Table M-1. This Permit modification took effect July 15, 2018. (NMED, 2018)
- The NMED approved a Permit modification that included minor changes to correct errors in Table M-1; one of these errors was the requirement to conduct annual inspections at SWMU 98. This Permit modification took effect October 22, 2018. (NMED, 2018)

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3.0 INSPECTIONS, MAINTENANCE, AND REPAIR ACTIVITIES

This chapter presents a summary of inspection, maintenance, and repair activities conducted during the reporting period January through December 2018. SWMUs and AOCs with an “Annual” designation in Table 2-1 were inspected during 2018 (exceptions are noted in the table). Table 3-1 summarizes and discusses issues noted during inspections, together with maintenance and repair activities.

3.1 Maintenance of Administrative Controls

The information about each SWMU and AOC was maintained during 2018 and reviewed as needed during planning activities. Specific activities included:

- Reviewing information from annual inspections to determine whether maintenance or repairs were needed;
- Reviewing approximately 150 plans for future activities at or near the SWMUs and AOCs to verify that the planned activities would not compromise the controls in place; and
- Following each review, notifying the appropriate personnel of the controls at SWMUs and AOCs at or near the planned activities, and the actions needed to avoid compromising the controls.

3.2 Inspection Activities

Personnel inspected each SWMU and AOC (except where not feasible as noted in Table 2-1) during the summer months of 2018. During each inspection, personnel walked over the SWMU or AOC and recorded observations of the site perimeter and internal site areas. Large SWMUs and AOCs were inspected by following a grid pattern across the site.

Personnel monitored and recorded the following information:

- Condition of site;
- Evidence of erosion, seepage or subsidence;
- Evidence of newly-occurring or newly-visible contamination;
- Condition and location of signs;
- Evidence of activities that were not consistent with the restrictions in place; and
- Evidence of any residential activities adjacent to the given SWMU or AOC that would necessitate additional awareness measures and access restrictions for the site.

Table 3-1
Summary of 2018 Inspection Results and Maintenance at
Solid Waste Management Units and Areas of Concern Requiring Controls
Sandia National Laboratories, New Mexico

SWMU or AOC Number	Inspection Completion Date	Required Maintenance	Maintenance Performed	Maintenance Completion Date	Other Conditions or Events
1	6/11/18	None	N/A	N/A	None observed
2	6/11/18	None	N/A	N/A	None observed
3	6/11/18	None	N/A	N/A	None observed
4	7/26/18	None	N/A	N/A	None observed
45	7/16/18	No 2018 maintenance identified during 2018 annual inspection.	Plan to implement a Slope Stabilization Project to control erosion along the TA-IV, Tijeras Arroyo Escarpment. The SWMU and AOC Annual LTMM Report for CY 2019 will report on these future activities.	Slope Stabilization Project – completion planned in 2019. This project will include SWMUs 45, 46, and 229.	None observed.
46	7/16/18	No 2018 maintenance identified during 2018 annual inspection.	Plan to implement a Slope Stabilization Project to control erosion along the TA-IV, Tijeras Arroyo Escarpment. The SWMU and AOC Annual LTMM Report for CY 2019 will report on these future activities.	Slope Stabilization Project – completion planned in 2019. This project will include SWMUs 45, 46, and 229.	None observed
58FF	6/22/18	None	N/A	N/A	None observed
58B/8Y	6/22/18	None	N/A	N/A	None observed

See notes at end of table.

Table 3-1 (Concluded)
Summary of 2018 Inspection Results and Maintenance at
Solid Waste Management Units and Areas of Concern Requiring Controls
Sandia National Laboratories, New Mexico

SWMU or AOC Number	Inspection Completion Date	Required Maintenance	Maintenance Performed	Maintenance Completion Date	Other Conditions or Events
87	8/30/18	None	N/A	N/A	None observed
91	8/8/18	None	N/A	NA	None observed
98	7/20/18	None	N/A	N/A	None observed
105	7/20/18	None	N/A	N/A	None observed
135	6/11/18	None	N/A	N/A	None observed
137	7/20/18	None	N/A	N/A	None observed
154	8/1/18	None	NA	NA	None observed
190	7/19/18	None	N/A	N/A	None observed
196	8/15/18	None	N/A	N/A	None observed
229	7/16/18	No 2018 maintenance identified during 2018 annual inspection.	Plan to implement a Slope Stabilization Project to control erosion along the TA-IV, Tijeras Arroyo Escarpment. The SWMU and AOC Annual LTMM Report for CY 2019 will report on these future activities.	Slope Stabilization Project – completion planned in 2019. This project will include SWMUs 45, 46, and 229.	None observed
1029	7/26/18	None	N/A	N/A	None observed
1081	7/24/18	None	N/A	N/A	None observed
1090	7/25/18	None	N/A	N/A	None observed

Notes:

SWMUs 96, 187, and 226 were not inspected because these SWMUs consist of underground drain lines. Inspections are not feasible.

AOC = Area of Concern.

LTMM = Long-Term Monitoring and Maintenance.

N/A = Not applicable.

NMED = New Mexico Environment Department.

SWMU = Solid Waste Management Unit.

TA = Technical Area.

Inspection records are maintained in the Operating Record at SNL/NM in accordance with the Permit requirements.

3.3 Inspection Results

Table 3-1 summarizes the results of the 24 annual inspections. Three subsurface sites, SWMUs 96, 187, and 226 could not be inspected, as noted in Table 2-1. SWMU 98 is also a subsurface site, as noted in Table 2-1. However, Permit Attachment M, Table M-1, specifies an annual inspection; therefore, an annual inspection of the building perimeter was conducted. The requirement for an annual inspection of SWMU 98 was revised in a Permit modification effective October 22, 2018.

Evidence of erosion, such as small gullies and rills, was observed at SWMU 45 during the 2017 annual site inspection (SNL/NM March 2018). There was no significant growth of this gullied area along the TA-IV escarpment in 2018 and no additional areas of erosion were identified during the 2018 annual inspections.

There were no other maintenance requirements or concerns, such as erosion or subsidence, observed during the 2018 annual inspections.

3.4 Maintenance and Repair Activities

SNL/NM personnel have developed an erosion mitigation plan (TA-IV Slope Stabilization Project) designed to mitigate erosion occurring along the SNL TA-IV escarpment; the scope will include SWMUs 45, 46, and 229. The design includes extensive concrete and riprap structures as well as permanent erosion control blankets. SNL/NM personnel plan to complete this work in calendar year 2019. The status and progress of this project will be reported in the 2020 SWMUs and AOCs Annual LTMM Report for CY 2019 to be submitted to the New Mexico Environment Department on or before March 31, 2020, as required by the Permit.

3.5 Status of Previous Maintenance and Repair Activities

Table 3-1 notes that the planned TA-IV Slope Stabilization Project work for calendar year 2018 has been re-scheduled for completion in 2019. The status and progress of this project will be reported in the SWMUs and AOCs Annual LTMM Report for Calendar Year 2019 to be submitted to NMED on March 31, 2020.

3.6 Other Conditions or Events

During each inspection, personnel observed the adjacent areas. No activities inconsistent with site restrictions were observed during the site inspections. No evidence of residential activities were noted adjacent to any of the inspected SWMUs or AOCs.

4.0 SUMMARY AND CONCLUSIONS

During 2018, maintenance and inspections of long-term controls at SWMUs and AOCs were performed as described and documented in this report.

Evidence of erosion, such as small gullies and rills, was observed at SWMU 45 during the 2017 annual site inspection (SNL/NM March 2018). There was no significant growth of this gullied area along the TA-IV escarpment in 2018, and no additional areas of erosion were identified during the 2018 annual inspections.

SNL/NM personnel have developed a plan (TA-IV Slope Stabilization Project) designed to mitigate erosion occurring along the SNL TA-IV escarpment. This project will include SWMUs 45, 46, and 229 and is scheduled for completion in CY 2019. The status and progress of this project will be reported in the SWMUs and AOCs Annual LTMM Report for CY 2019 that will be submitted to the NMED on or before March 31, 2020, as required by the Permit.

No conditions requiring maintenance or repair activities were observed at any of the inspected SWMUs or AOCs during 2018.

Personnel associated with approximately 150 planned projects at SNL/NM were notified of controls associated with SWMUs and AOCs so that the controls would not be impacted by the planned activities.

Based upon the inspections performed and site conditions observed, the administrative and physical institutional controls in place at the SWMUs and AOCs are effectively providing continued protection of human health and the environment.

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5.0 REFERENCES

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